

# ABSTRACT OF THE DISCLOSURE

The tunable differential transconductor includes a tail current sink and a differentially-connected pair of FETs connected to the tail current source. At least  
5 one of the FETs is a composite FET that includes a main FET connected in parallel with a switchable tuning element. The switchable tuning element is operable to change an effective channel dimension, i.e., at least one of effective channel length and effective channel width, of the composite FET. In the method,  
10 a differential transconductor that includes a tail current sink and a differentially-connected pair of composite FETs connected to the tail current sink is provided. The effective channel dimension of at least one of the composite FETs is changed to establish one or more of a desired transconductance, a desired transconductance linearity and a desired offset of the differential transconductor.